



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Vogels et al.

Serial No.: 09/444,284

Filed: November 19, 1999

For: GENE DELIVERY VECTORS
PROVIDED WITH A TISSUE TROPISM
FOR SMOOTH MUSCLE CELLS, AND/OR
ENDOTHELIAL CELLS

Confirmation No.: 8464

Examiner: S. Chen

Group Art Unit: 1632

Attorney Docket No.: 2578-4231US

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08 be considered by the Examiner and made of record.

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as

defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56 (b) exists.

Pursuant to 37 C.F.R. § 1.98(d), a copy of any patent, publication or other information listed in the Information Disclosure Statement is not required to be provided if it was previously cited by or submitted to the office in a prior application, provided that the prior application is properly identified in the statement and relied upon for an earlier filing date under 35 U.S.C. § 120.

Accordingly, no copy of information marked with a pound sign (#) is enclosed because it was previously cited or submitted to the patent office in a prior application which is properly identified above, and is relied upon for an earlier filing date. The references are as follows:

U.S. Patent Documents

<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
#US- 4,487,829	12/11/1984	Sharp et al.
#US- 4,517,686	05/21/1985	Ruoslahti et al.
#US- 4,578,079	03/25/1986	Ruoslahti et al.
#US- 4,589,881	05/20/1986	Pierschbacher et al.
#US- 4,593,002	06/03/1986	Dulbecco
#US- 4,792,525	12/20/1988	Ruoslahti et al.
#US- 4,797,368	01/10/1989	Carter et al.
#US- 4,956,281	09/11/1990	Wallner et al.
#US- 5,024,939	06/18/1991	Gorman
#US- 5,096,815	03/17/1992	Ladner et al.
#US- 5,166,320	11/24/1992	Wu et al.
#US- 5,198,346	03/30/1993	Ladner et al.
#US- 5,204,445	04/20/1993	Plow et al.
#US- 5,223,394	06/29/1993	Wallner
#US- 5,223,409	06/29/1993	Ladner et al.
#US- 5,240,846	08/31/1993	Collins et al.

Serial No.: 09/444,284

#US- 5,246,921	09/21/1993	Reddy et al.
#US- 5,332,567	07/26/1994	Goldenberg
#US- 5,349,053	09/20/1994	Landolfi
#US- 5,403,484	04/04/1995	Ladner et al.
#US- 5,436,146	07/25/1995	Shenk et al.
#US-5,443,953	08/22/1995	Hansen et al.
#US- 5,474,935	12/12/1995	Chatterjee et al.
#US- 5,521,291	05/28/1996	Curiel et al.
#US- 5,534,423	07/09/1996	Palsson et al.
#US- 5,543,328	08/06/1996	McClelland et al.
#US- 5,547,932	08/20/1996	Curiel et al.
#US- 5,552,311	09/03/1996	Sorscher et al.
#US- 5,559,099	09/24/1996	Wickham et al.
#US- 5,571,698	11/05/1996	Ladner et al.
#US- 5,622,699	04/22/1997	Ruoslahti et al.
#US- 5,712,136	01/27/1998	Wickham et al.
#US- 5,731,190	03/24/1998	Wickham et al.
#US- 5,756,086	05/26/1998	McClelland et al.
#US- 5,770,442	06/23/1998	Wickham et al.
#US- 5,922,315	07/13/1999	Roy
#US- 6,127,525	10/03/2000	Crystal et al.

Foreign Patent Documents

<u>Document No.</u>	<u>Publication Date</u>	<u>Patentee</u>
#259212	03/09/1988	EP
#2078631	03/19/1990	JP
#WO 91/00360	01/10/1991	PCT

Serial No.: 09/444,284

#WO 91/05805	05/02/1991	PCT
#WO 91/05871	05/02/1991	PCT
#WO 92/02553	02/20/1992	PCT
#WO 92/13081	08/06/1992	PCT
#WO 93/03769	03/04/1993	PCT
#WO 93/06223	04/01/1993	PCT
#WO 93/07282	04/15/1993	PCT
#WO 93/07283	04/15/1993	PCT
#WO 94/08026	04/14/1994	PCT
#WO 94/10323	05/11/1994	PCT
#WO 94/11506	05/26/1994	PCT
#WO 94/15644	07/21/1994	PCT
#WO 94/17832	08/14/1994	PCT
#WO 94/24299	10/27/1994	PCT
#WO 94/26915	11/24/1994	PCT
#WO 95/05201	02/23/1995	PCT
#WO 95/06745	03/09/1995	PCT
#WO 95/14785	06/01/1995	PCT
#WO 95/16037	06/15/1995	PCT
#WO 95/21259	08/10/1995	PCT
#WO 95/26412	10/05/1995	PCT
#WO 95/27071	10/12/1995	PCT
#WO 95/31187	11/23/1995	PCT
#WO 95/31566	11/23/1995	PCT
#WO 96/00790	01/11/1996	PCT
#WO 96/07739	03/14/1996	PCT
#WO 96/10087	04/04/1996	PCT
#WO 96/13597	05/09/1996	PCT

Serial No.: 09/444,284

#WO 96/14837	05/23/1996	PCT
#WO 96/17073	06/06/1996	PCT
#WO 96/18740	06/20/1996	PCT
#WO 96/26281	08/29/1996	Wickham et al.
#WO 97/00326	01/03/1997	PCT
#WO 97/24453	07/10/1997	PCT
#WO 97/38723	10/23/1997	PCT
#WO 98/07865	02/26/1998	PCT
#WO 98/11221	03/19/1998	PCT
#WO 98/13499	04/02/1998	PCT
#WO 98/22609	05/28/1998	PCT
#WO 98/32842	07/30/1998	PCT
#WO 98/40509	09/17/1998	PCT
#WO 98/50053 A1	11/12/1998	Gorziglia Mario
#WO 99/47180 A1	09/23/1999	Genzyme Corp.
#WO 00/31285 A1	06/02/2000	Introgene B.V.
#WO 00/52186 A1	09/08/2000	Bout Abraham
#WO 00/70071 A1	11/23/2000	Bout Abraham
#WO 02/24730 A2	03/28/2002	Crucell Holland B.V.

Other Documents

#ALBIGES-RIZO et al., Human Adenovirus Serotype 3 Fiber Protein, Journal of Biological Chemistry, 266(6), 3961-3967 (1991).

#BAI et al., Mutations That Alter an Arg-Gly-Asp (RGD) Sequence in the Adenovirus Type 2 Penton Base Protein Abolish Its Cell-Rounding Activity and Delay Virus Reproduction in Flat Cells, Journal of Virology, 67(9), 5198-5205 (1993).

#BAILEY et al., Phylogenetic Relationships among Adenovirus Serotypes, Virology, 205, 438-452 (1994).

#BALL-GOODRICH et al., "Parvoviral Target Cell Specificity: Acquisition of Fibrotropism by a Mutant of the Lymphotropic Strain of Minute Virus of Mice Involves Multiple Amino Acid Substitutions within the Capsid," *Virology*, 184, 175-186 (1991).

#BATRA et al., Receptor-mediated gene delivery employing lectin-binding specificity, *Gene Therapy*, 1, 255-260 (1994).

#BOURNELL et al., In vitro construction of a recombinant adenovirus Ad2:Ad5, *Gene*, 13, 311-317 (1981).

#CAILLET-BOUDIN et al., Functional and Structural Effects of an Ala to Val Mutation in the Adenovirus Serotype 2 Fibre, *J. Mol. Biol.*, 217, 477-486 (1991).

#CHROBOCZEK et al., The Sequence of the Genome of Adenovirus Type 5 and Its Comparison with the Genome of Adenovirus Type 2, *Virology*, 186, 280-285 (1992).

#CHU et al., "Cell targeting with retroviral vector particles containing antibody-envelope fusion proteins," *Gene Therapy*, 1, 292-299 (1994).

#COTTEN et al., "High-efficiency receptor-mediated delivery of small and large (48 kilobase gene constructs using the endosome-disruption activity of defective or chemically inactivated adenovirus particles," *Proc. Natl. Acad. Sci. USA*, 89, 6094-6098 (1992).

#COTTEN et al., "Transferrin-polycation-mediated introduction of DNA into human leukemic cells: Stimulation by agents that affect the survival of transfected DNA or modulate transferrin receptor levels," *Proc. Natl. Acad. Sci. USA*, 87, 4033-4037 (1990).

#CRAWFORD-MIKSZA et al., Adenovirus Serotype Evolution Is Driven by Illegitimate Recombination in the Hypervariable Regions of the Hexon Protein, *Virology*, 224, 357-367 (1996).

#CRAWFORD-MIKSZA et al., Analysis of 15 Adenovirus Hexon Proteins Reveals the Location and Structure of Seven Hypervariable Regions Containing Serotype-Specific Residues, *J. Virol.*, 70(3), 1836-1844 (1996).

#CROMPTON et al., Expression of a foreign epitope on the surface of the adenovirus hexon, *J. Gen. Virol.*, 75(1), 133-139 (1994).

#CRYSTAL, Transfer of Genes to Humans: Early Lessons and Obstacles to Success, *Science*, 270, 404-410 (1995).

#CURIEL et al., "Adenovirus enhancement of transferrin-polylysine-mediated gene delivery," *Proc. Natl. Acad. Sci. USA*, 88, 8850-8854 (1991).

#CURIEL et al., "High-Efficiency Gene Transfer Mediated by Adenovirus Coupled to DNA-Polylysine Complexes," *Human Gene Therapy*, 3, 147-154 (1992).

#DE JONG et al., "Adenoviruses from Human Immunodeficiency Virus-Infected Individuals, Including Two Strains That Represent New Candidate Serotypes Ad50 and Ad51 of Species B1 and D, Respectively," 37(12) *Journal of Clinical Microbiology* 3940-45, American Society for Microbiology (Dec. 1999).

#DEFER et al., Human Adenovirus-Host Cell Interactions: Comparative Study with Members of Subgroups B and C, *Journal of Virology*, 64(8), 3661-3673 (1990).

#DUPUIT et al., "Regenerating Cells in Human Airway Surface Epithelium Represent Preferential Targets for Recombinant Adenovirus," *Human Gene Therapy*, 6, 1185-1193 (1995).

#ETIENNE-JULAN et al., "The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker," *Journal of General Virology*, 73, 3251-3255 (1992).

#FALGOUT et al., Characterization of Adenovirus Particles Made by Deletion Mutants Lacking the Fiber Gene, *Journal of Virology*, 62(2), 622-625 (1988).

#GALL et al., "Adenovirus type 5 and 7 capsid chimera: Fiber replacement alters receptor tropism without affecting primary immune neutralization epitopes," 70(4) *Journal of Virology* 2116-23 (1996).

#GALL et al., "Construction and characterization of Hexon-Chimeric Adenoviruses: Specification of adenovirus serotype," 72(12) *Journal of Virology* 10260-64 (1998).

#GREBER et al., "Stepwise Dismantling of Adenovirus 2 during Entry into Cells," *Cell*, 75, 477-486 (1993).

#GREEN et al., Evidence for a repeating cross- β sheet structure in the adenovirus fibre, *EMBO Journal*, 2(8), 1357-1365 (1983).

#HAN et al., "Ligand-directed retroviral targeting of human breast cancer cells," *Proc. Natl. Acad. Sci. USA*, 92, 9747-9751 (1995).

#HENRY et al., Characterization of the Knob Domain of the Adenovirus Type 5 Fiber

Protein Expressed in Escherichia coli, Journal of Virology, 68(8), 5239-5246 (1994).

#HONG et al., The Amino Terminus of the Adenovirus Fiber Protein Encodes the Nuclear Localization Signal, Virology, 185(2), 758-767 (1991).

#HORVATH et al., "Nonpermissivity of Human Peripheral Blood Lymphocytes to Adenovirus Type 2 Infection," Journal of Virology, 62(1), 341-345 (1988).

#HUANG et al., "Upregulation of Integrins $\alpha\beta 3$ and $\alpha\beta 5$ on Human Monocytes and T Lymphocytes Facilitates Adenovirus-Mediated Gene Delivery," Journal of Virology, 69(4), 2257-2263 (1995).

#KARAYAN et al., Oligomerization of Recombinant Penton Base of Adenovirus Type 2 and Its Assembly with Fiber in Baculovirus-Infected Cells, Virology, 202, 782-795 (1994).

#KASS-EISLER et al., "Quantitative determination of adenovirus-mediated gene delivery to rat cardiac myocytes *in vitro* and *in vivo*," Proc. Natl. Acad. Sci. USA, 90, 11498-11502 (1993).

#KOMORIYA et al., "The Minimal Essential Sequence for a Major Cell Type-specific Adhesion Site (CS1) within the Alternatively Spliced Type III Connecting Segment Domain of Fibronectin Is Leucine-Aspartic Acid-Valine," Journal of Biological Chemistry, 266(23), 15075-15079 (1991).

#MARAVEYAS et al., "Targeted Immunotherapy – An update with special emphasis on ovarian cancer," Acta Oncologica, 32(7/8), 741-746 (1993).

#MASTRANGELI et al., "Sero-Switch" Adenovirus-Mediated In Vivo Gene Transfer: Circumvention of Anti-Adenovirus Humoral Immune Defenses Against Repeat Adenovirus Vector Administration by Changing the Adenovirus Serotype, Human Gene Therapy, 7, 79-87 (1996).

#MASTRANGELI et al., "In Vivo Gene Transfer to the Lung of Experimental Animals Using a Chimeric Ad5/Ad7 Adenovirus Vector," Ped. Pulm., Suppl., 12, 230, Abst. No. 180 (1995).

#MATHIAS et al., Multiple Adenovirus Serotypes Use αv Integrins for Infection, Journal of Virology, 68(10), 6811-6814 (1994).

#MAUTNER et al., Recombination in Adenovirus: Analysis of Crossover Sites in

Intertypic Overlap Recombinants, *Virology*, 139, 43-52, (1984).

#MAUTNER et al., Recombination in Adenovirus: DNA Sequence Analysis of Crossover Sites in Intertypic Recombinants, *Virology*, 131, 1-10 (1983).

#MICHAEL et al., "Binding-incompetent Adenovirus Facilitates Molecular Conjugate-mediated Gene Transfer by the Receptor-mediated Endocytosis Pathway," *Journal of Biological Chemistry*, 268(10), 6866-6869 (1993).

#MICHAEL et al., Addition of a short peptide ligand to the adenovirus fiber protein, *Gene Therapy*, 2, 660-668 (1995).

#MILLER et al., Targeted vectors for gene therapy, *FASEB Journal*, 9, 190-199 (1995).

#NEDA et al., "Chemical Modification of an Ecotropic Murine Leukemia Virus Results in Redirection of Its Target Cell Specificity," *Journal of Biological Chemistry*, 266(22), 14143-14146 (1991).

#NEMEROW et al., Adenovirus entry into host cells: a role for αv integrins, *Trends In Cell Biology*, 4, 52-55 (1994).

#NEMEROW et al., The Role of αv Integrins in Adenovirus Infection, *Biology of Vitronectins and their Receptors*, 177-184 (1993).

#NOVELLI et al., Deletion Analysis of Functional Domains in Baculovirus-Expressed Adenovirus Type 2 Fiber, *Virology*, 185, 365-376 (1991).

#ORKIN et al., "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy," (1995), file:///F:/NIHrec.htm 1/4/01 1:37 pm.

#PCT International Preliminary Examination Report, PCT/EP01/10999, dated September 23, 2002 (11 pages).

#PCT International Search Report, International Application No. PCT/EP01/10999, dated March 26, 2002 (6 pages).

#PETERANDERL et al., "Trimerization of the Heat Shock Transcription Factor by a Triple-Stranded α -Helical Coiled-Coil," *Biochemistry*, 31, 12272-12276 (1992).

#PRING-ÅKERBLOM et al., Sequence Characterization and Comparison of Human Adenovirus Subgenus B and E Hexons, *Virology*, 212, 232-36 (1995).

#ROBERTS et al., Three-Dimensional Structure of the Adenovirus Major Coat Protein

Hexon, Science, 232, 1148-51 (1986).

#RUSSELL et al., "Retroviral vectors displaying functional antibody fragments," Nucleic Acids Research, 21(5), 1081-1085 (1993).

#SIGNÄS et al., Adenovirus 3 Fiber Polypeptide Gene: Implications for the Structure of the Fiber Protein, Journal of Virology, 53(2), 672-678 (1985).

#SILVER et al., Interaction of Human Adenovirus Serotype 2 with Human Lymphoid Cells, Virology, 165, 377-387 (1988).

#STEVENSON et al., "Selective targeting of human cells by a chimeric adenovirus vector containing a modified fiber protein," 71(6) Journal of Virology, 4782-90 (1997).

#STEWART et al., Difference imaging of adenovirus: bridging the resolution gap between X-ray crystallography and electron microscopy, EMBO Journal, 12(7), 2589-2599 (1993).

#VERMA et al., Gene Therapy - promises, problems and prospects, Nature, 389, 239-42 (1997).

#WADELL, G., Molecular Epidemiology of Human Adenoviruses, Curr. Top. Microbiol. Immunol., 110, 191-220 (1984).

#WATSON et al., "An Antigenic Analysis of the Adenovirus Type 2 Fibre Polypeptide," Journal of Virology, 69, 525-535 (1988).

#WATSON et al., An Antigenic Analysis of the Adenovirus Type 2 Fibre Polypeptide, Journal of Virology, 69, 525-535 (1988).

#WICKHAM et al., Integrin $\alpha\beta 5$ Selectively Promotes Adenovirus Mediated Cell Membrane Permeabilization, Journal of Cell Biology, 127(1), 257-264 (1994).

#WICKHAM et al., Integrins $\alpha\beta 3$ and $\alpha\beta 5$ Promote Adenovirus Internalization but Not Virus Attachment, Cell, 73, 309-319 (1993).

#Pursuant to 37 C.F.R. § 1.98(d), copies of the previously identified patents are not being provided since they were previously cited by or submitted to the Office in the following prior application:

Serial No.: 09/348,354

Filed: July 7, 1999

For: CHIMAERIC ADENOVIRUSES, which application is being relied upon for an earlier filing date under 35 U.S.C. § 120.

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, Applicants hereby identify the following listed copending applications naming a common inventor(s):

Attorney Docket No.: 2578-4622.1US
Serial No.: 10/432,105
Filing Date: 5/20/2003
Title: ADENOVIRAL REPLICONS

Attorney Docket No.: 2578-6386US
Serial No.: 10/494,140
Filing Date: 4/29/2004
Title: METHODS AND MEANS FOR PRODUCING PROTEINS WITH
PREDETERMINED POST-TRANSLATIONAL
MODIFICATIONS

Attorney Docket No.: 2578-6471US
Serial No.: 10/499,298
Filing Date: 6/17/2004
Title: EFFICIENT PRODUCTION OF F(AB')₂ FRAGMENTS IN
MAMMALIAN CELLS

Attorney Docket No.: 2578-3833.9US
Serial No.: 10/618,526
Filing Date: 7/11/2003
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT
ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-6077US
Serial No.: 10/644,256
Filing Date: 8/20/2003
Title: EFFICIENT PRODUCTION OF IgA IN RECOMBINANT
MAMMALIAN CELLS

Attorney Docket No.: 2578-4489.1US
Serial No.: 10/646,449
Filing Date: 8/22/2003
Title: GENE DELIVERY VECTORS PROVIDED WITH A TISSUE
TROPISM FOR DENDRITIC CELLS AND METHODS OF USE

Serial No.: 09/444,284

Attorney Docket No.: 2578-3982.3US
Serial No.: 10/783,510
Filing Date: 2/20/2004
Title: MEANS AND METHODS FOR FIBROBLAST-LIKE OR
MACROPHAGE-LIKE CELL TRANSDUCTION

Attorney Docket No.: 2578-4038.3US
Serial No.: 10/790,562
Filing Date: 3/1/2004
Title: RECOMBINANT PROTEIN PRODUCTION IN A HUMAN
CELL

Attorney Docket No.: 2578-4230.1US
Serial No.: 10/808,681
Filing Date: 3/25/2004
Title: MELANOMA ASSOCIATED PEPTIDE ANALOGUES AND
VACCINES AGAINST MELANOMA

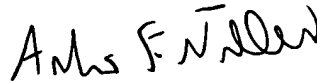
Attorney Docket No.: 2578-3833.10US
Serial No.: 10/850,140
Filing Date: 5/20/2004
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT
ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-4070.2US
Serial No.: To be assigned
Filing Date: September 27, 2004
Title: SEROTYPES OF ADENOVIRUS AND USES THEREOF

Serial No.: 09/444,284

This Supplemental Information Disclosure Statement is believed to be filed before the mailing date of the first Office Action on the merits subsequent to the filing of an RCE in the above-identified application.

Respectfully submitted,



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Enclosures: Form PTO/SB/08

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PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 7

Complete if Known

Application Number	09/444,284
Filing Date	November 19, 1999
First Named Inventor	Vogels et al.
Group Art Unit	1632
Examiner Name	Chen
Attorney Docket Number	2578-4231US

U.S. PATENT DOCUMENTS

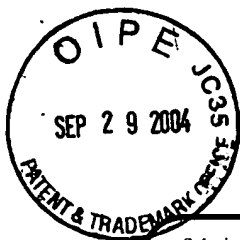
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		#US- 4,487,829	12/11/1984	Sharp et al.	
		#US- 4,517,686	05/21/1985	Ruoslahti et al.	
		#US- 4,578,079	03/25/1986	Ruoslahti et al.	
		#US- 4,589,881	05/20/1986	Pierschbacher et al.	
		#US- 4,593,002	06/03/1986	Dulbecco	
		#US- 4,792,525	12/20/1988	Ruoslahti et al.	
		#US- 4,797,368	01/10/1989	Carter et al.	
		#US- 4,956,281	09/11/1990	Wallner et al.	
		#US- 5,024,939	06/18/1991	Gorman	
		#US- 5,096,815	03/17/1992	Ladner et al.	
		#US- 5,166,320	11/24/1992	Wu et al.	
		#US- 5,198,346	03/30/1993	Ladner et al.	
		#US- 5,204,445	04/20/1993	Plow et al.	
		#US- 5,223,394	06/29/1993	Wallner	
		#US- 5,223,409	06/29/1993	Ladner et al.	
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		#US- 5,246,921	09/21/1993	Reddy et al.	
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		#US- 5,349,053	09/20/1994	Landolfi	
		#US- 5,403,484	04/04/1995	Ladner et al.	
		#US- 5,436,146	07/25/1995	Shenk et al.	
		#US- 5,443,953	08/22/1995	Hansen et al.	
		#US- 5,474,935	12/12/1995	Chatterjee et al.	
		#US- 5,521,291	05/28/1996	Curiel et al.	
		#US- 5,534,423	07/09/1996	Palsson et al.	
		#US- 5,543,328	08/06/1996	McClelland et al.	
		#US- 5,547,932	08/20/1996	Curiel et al.	
		#US- 5,552,311	09/03/1996	Sorscher et al.	
		#US- 5,559,099	09/24/1996	Wickham et al.	
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		#US- 5,622,699	04/22/1997	Ruoslahti et al.	
		#US- 5,712,136	01/27/1998	Wickham et al.	
		#US- 5,731,190	03/24/1998	Wickham et al.	
		#US- 5,756,086	05/26/1998	McClelland et al.	
		#US- 5,770,442	06/23/1998	Wickham et al.	
		#US- 5,922,315	07/13/1999	Roy	
		#US- 6,127,525	10/03/2000	Crystal et al.	
Examiner Signature				Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Application Number	09/444,284
Filing Date	November 19, 1999
First Named Inventor	Vogels et al.
Group Art Unit	1632
Examiner Name	Chen
Attorney Docket Number	2578-4231US

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		#259212	03/09/1988	EP		
		#2078631	03/19/1990	JP		
		#WO 91/00360	01/10/1991	PCT		
		#WO 91/05805	05/02/1991	PCT		
		#WO 91/05871	05/02/1991	PCT		
		#WO 92/02553	02/20/1992	PCT		
		#WO 92/13081	08/06/1992	PCT		
		#WO 93/03769	03/04/1993	PCT		
		#WO 93/06223	04/01/1993	PCT		
		#WO 93/07282	04/15/1993	PCT		
		#WO 93/07283	04/15/1993	PCT		
		#WO 94/08026	04/14/1994	PCT		
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		#WO 94/11506	05/26/1994	PCT		
		#WO 94/15644	07/21/1994	PCT		
		#WO 94/17832	08/14/1994	PCT		
		#WO 94/24299	10/27/1994	PCT		
		#WO 94/26915	11/24/1994	PCT		
		#WO 95/05201	02/23/1995	PCT		
		#WO 95/06745	03/09/1995	PCT		
		#WO 95/14785	06/01/1995	PCT		
		#WO 95/16037	06/15/1995	PCT		
		#WO 95/21259	08/10/1995	PCT		
		#WO 95/26412	10/05/1995	PCT		
		#WO 95/27071	10/12/1995	PCT		
		#WO 95/31187	11/23/1995	PCT		
		#WO 95/31566	11/23/1995	PCT		
		#WO 96/00790	01/11/1996	PCT		
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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		#ALBIGES-RIZO et al., Human Adenovirus Serotype 3 Fiber Protein, Journal of Biological Chemistry, 266(6), 3961-3967 (1991).	
		#BAI et al., Mutations That Alter an Arg-Gly-Asp (RGD) Sequence in the Adenovirus Type 2 Penton Base Protein Abolish Its Cell-Rounding Activity and Delay Virus Reproduction in Flat Cells, Journal of Virology, 67(9), 5198-5205 (1993).	
		#BAILEY et al., Phylogenetic Relationships among Adenovirus Serotypes, Virology, 205, 438-452 (1994).	
		#BALL-GOODRICH et al., "Parvoviral Target Cell Specificity: Acquisition of Fibrotropism by a Mutant of the Lymphotropic Strain of Minute Virus of Mice Involves Multiple Amino Acid Substitutions within the Capsid," Virology, 184, 175-186 (1991).	
		#BATRA et al., Receptor-mediated gene delivery employing lectin-binding specificity, Gene Therapy, 1, 255-260 (1994).	
		#BOURNSNELL et al., In vitro construction of a recombinant adenovirus Ad2:Ad5, Gene, 13, 311-317 (1981).	
		#CAILLET-BOUDIN et al., Functional and Structural Effects of an Ala to Val Mutation in the Adenovirus Serotype 2 Fibre, J. Mol. Biol., 217, 477-486 (1991).	
		#CHROBOCZEK et al., The Sequence of the Genome of Adenovirus Type 5 and Its Comparison with the Genome of Adenovirus Type 2, Virology, 186, 280-285 (1992).	
		#CHU et al., "Cell targeting with retroviral vector particles containing antibody-envelope fusion proteins," Gene Therapy, 1, 292-299 (1994).	
		#COTTEN et al., "High-efficiency receptor-mediated delivery of small and large (48 kilobase gene constructs using the endosome-disruption activity of defective or chemically inactivated adenovirus particles," Proc. Natl. Acad. Sci. USA, 89, 6094-6098 (1992).	
		#COTTEN et al., "Transferrin-polycation-mediated introduction of DNA into human leukemic cells: Stimulation by agents that affect the survival of transfected DNA or modulate transferrin receptor levels," Proc. Natl. Acad. Sci. USA, 87, 4033-4037 (1990).	
		#CRAWFORD-MIKSZA et al., Adenovirus Serotype Evolution Is Driven by Illegitimate Recombination in the Hypervariable Regions of the Hexon Protein, Virology, 224, 357-367 (1996).	
		#CRAWFORD-MIKSZA et al., Analysis of 15 Adenovirus Hexon Proteins Reveals the Location and Structure of Seven Hypervariable Regions Containing Serotype-Specific Residues, J. Virol., 70(3), 1836-1844 (1996).	
		#CROMPTON et al., Expression of a foreign epitope on the surface of the adenovirus hexon, J. Gen. Virol., 75(1), 133-139 (1994).	
		#CRYSTAL, Transfer of Genes to Humans: Early Lessons and Obstacles to Success, Science, 270, 404-410 (1995).	
		#CURIEL et al., "Adenovirus enhancement of transferrin-polylysine-mediated gene delivery," Proc. Natl. Acad. Sci. USA, 88, 8850-8854 (1991).	
		#CURIEL et al., "High-Efficiency Gene Transfer Mediated by Adenovirus Coupled to DNA-Polylysine Complexes," Human Gene Therapy, 3, 147-154 (1992).	

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First Named Inventor	Vogels et al.
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Attorney Docket Number	2578-4231US

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		#DE JONG et al., "Adenoviruses from Human Immunodeficiency Virus-Infected Individuals, Including Two Strains That Represent New Candidate Serotypes Ad50 and Ad51 of Species B1 and D, Respectively," 37(12) Journal of Clinical Microbiology 3940-45, American Society for Microbiology (Dec. 1999).	
		#DEFER et al., Human Adenovirus-Host Cell Interactions: Comparative Study with Members of Subgroups B and C, Journal of Virology, 64(8), 3661-3673 (1990).	
		#DUPUIT et al., "Regenerating Cells in Human Airway Surface Epithelium Represent Preferential Targets for Recombinant Adenovirus," Human Gene Therapy, 6, 1185-1193 (1995).	
		#ETIENNE-JULAN et al., "The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker," Journal of General Virology, 73, 3251-3255 (1992).	
		#FALGOUT et al., Characterization of Adenovirus Particles Made by Deletion Mutants Lacking the Fiber Gene, Journal of Virology, 62(2), 622-625 (1988).	
		#GALL et al., "Adenovirus type 5 and 7 capsid chimera: Fiber replacement alters receptor tropism without affecting primary immune neutralization epitopes," 70(4) Journal of Virology 2116-23 (1996).	
		#GALL et al., "Construction and characterization of Hexon-Chimeric Adenoviruses: Specification of adenovirus serotype," 72(12) Journal of Virology 10260-64 (1998).	
		#GREBER et al., "Stepwise Dismantling of Adenovirus 2 during Entry into Cells," Cell, 75, 477-486 (1993).	
		#GREEN et al., Evidence for a repeating cross- β sheet structure in the adenovirus fibre, EMBO Journal, 2(8), 1357-1365 (1983).	
		#HAN et al., "Ligand-directed retroviral targeting of human breast cancer cells," Proc. Natl. Acad. Sci. USA, 92, 9747-9751 (1995).	
		#HENRY et al., Characterization of the Knob Domain of the Adenovirus Type 5 Fiber Protein Expressed in Escherichia coli, Journal of Virology, 68(8), 5239-5246 (1994).	
		#HONG et al., The Amino Terminus of the Adenovirus Fiber Protein Encodes the Nuclear Localization Signal, Virology, 185(2), 758-767 (1991).	
		#HORVATH et al., "Nonpermissivity of Human Peripheral Blood Lymphocytes to Adenovirus Type 2 Infection," Journal of Virology, 62(1), 341-345 (1988).	
		#HUANG et al., "Upregulation of Integrins $\alpha\beta 3$ and $\alpha\beta 5$ on Human Monocytes and T Lymphocytes Facilitates Adenovirus-Mediated Gene Delivery," Journal of Virology, 69(4), 2257-2263 (1995).	

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		#KARAYAN et al., Oligomerization of Recombinant Penton Base of Adenovirus Type 2 and Its Assembly with Fiber in Baculovirus-Infected Cells, Virology, 202, 782-795 (1994).	
		#KASS-EISLER et al., "Quantitative determination of adenovirus-mediated gene delivery to rat cardiac myocytes <i>in vitro</i> and <i>in vivo</i> ," Proc. Natl. Acad. Sci. USA, 90, 11498-11502 (1993).	
		#KOMORIYA et al., "The Minimal Essential Sequence for a Major Cell Type-specific Adhesion Site (CS1) within the Alternatively Spliced Type III Connecting Segment Domain of Fibronectin Is Leucine-Aspartic Acid-Valine," Journal of Biological Chemistry, 266(23), 15075-15079 (1991).	
		#MARAVEYAS et al., "Targeted Immunotherapy - An update with special emphasis on ovarian cancer," Acta Oncologica, 32(7/8), 741-746 (1993).	
		#MASTRANGELI et al., "Sero-Switch" Adenovirus-Mediated In Vivo Gene Transfer: Circumvention of Anti-Adenovirus Humoral Immune Defenses Against Repeat Adenovirus Vector Administration by Changing the Adenovirus Serotype, Human Gene Therapy, 7, 79-87 (1996).	
		#MASTRANGELI et al., "In Vivo Gene Transfer to the Lung of Experimental Animals Using a Chimeric Ad5/Ad7 Adenovirus Vector," Ped. Pulm., Suppl., 12, 230, Abst. No. 180 (1995).	
		#MATHIAS et al., Multiple Adenovirus Serotypes Use α v Integrins for Infection, Journal of Virology, 68(10), 6811-6814 (1994).	
		#MAUTNER et al., Recombination in Adenovirus: Analysis of Crossover Sites in Intertypic Overlap Recombinants, Virology, 139, 43-52, (1984).	
		#MAUTNER et al., Recombination in Adenovirus: DNA Sequence Analysis of Crossover Sites in Intertypic Recombinants, Virology, 131, 1-10 (1983).	
		#MICHAEL et al., "Binding-incompetent Adenovirus Facilitates Molecular Conjugate-mediated Gene Transfer by the Receptor-mediated Endocytosis Pathway," Journal of Biological Chemistry, 268(10), 6866-6869 (1993).	
		#MICHAEL et al., Addition of a short peptide ligand to the adenovirus fiber protein, Gene Therapy, 2, 660-668 (1995).	
		#MILLER et al., Targeted vectors for gene therapy, FASEB Journal, 9, 190-199 (1995).	
		#NEDA et al., "Chemical Modification of an Ecotropic Murine Leukemia Virus Results in Redirection of Its Target Cell Specificity," Journal of Biological Chemistry, 266(22), 14143-14146 (1991).	
		#NEMEROW et al., Adenovirus entry into host cells: a role for α v integrins, Trends In Cell Biology, 4, 52-55 (1994).	
		#NEMEROW et al., The Role of α v Integrins in Adenovirus Infection, Biology of Vitronectins and their Receptors, 177-184 (1993).	
		#NOVELLI et al., Deletion Analysis of Functional Domains in Baculovirus-Expressed Adenovirus Type 2 Fiber, Virology, 185, 365-376 (1991).	
		#ORKIN et al., "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy," (1995), file:///F:/NIHrec.htm 1/4/01 1:37 pm.	

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		#PCT International Preliminary Examination Report, PCT/EP01/10999, dated September 23, 2002 (11 pages).	
		#PCT International Search Report, International Application No. PCT/EP01/10999, dated March 26, 2002 (6 pages).	
		#PETERANDERL et al., "Trimerization of the Heat Shock Transcription Factor by a Triple-Stranded α -Helical Coiled-Coil," Biochemistry, 31, 12272-12276 (1992).	
		#PRING-ÅKERBLUM et al., Sequence Characterization and Comparison of Human Adenovirus Subgenus B and E Hexons, Virology, 212, 232-36 (1995).	
		#ROBERTS et al., Three-Dimensional Structure of the Adenovirus Major Coat Protein Hexon, Science, 232, 1148-51 (1986).	
		#RUSSELL et al., "Retroviral vectors displaying functional antibody fragments," Nucleic Acids Research, 21(5), 1081-1085 (1993).	
		#SIGNÅS et al., Adenovirus 3 Fiber Polypeptide Gene: Implications for the Structure of the Fiber Protein, Journal of Virology, 53(2), 672-678 (1985).	
		#SILVER et al., Interaction of Human Adenovirus Serotype 2 with Human Lymphoid Cells, Virology, 165, 377-387 (1988).	
		#STEVENSON et al., "Selective targeting of human cells by a chimeric adenovirus vector containing a modified fiber protein," 71(6) Journal of Virology, 4782-90 (1997).	
		#STEWART et al., Difference imaging of adenovirus: bridging the resolution gap between X-ray crystallography and electron microscopy, EMBO Journal, 12(7), 2589-2599 (1993).	
		#VERMA et al., Gene Therapy – promises, problems and prospects, Nature, 389, 239-42 (1997).	
		#WADELL, G., Molecular Epidemiology of Human Adenoviruses, Curr. Top. Microbiol. Immunol., 110, 191-220 (1984).	
		#WATSON et al., "An Antigenic Analysis of the Adenovirus Type 2 Fibre Polypeptide," Journal of Virology, 69, 525-535 (1988).	
		#WATSON et al., An Antigenic Analysis of the Adenovirus Type 2 Fibre Polypeptide, Journal of Virology, 69, 525-535	
		#WICKHAM et al., Integrin $\alpha v \beta 5$ Selectively Promotes Adenovirus Mediated Cell Membrane Permeabilization, Journal of Cell Biology, 127(1), 257-264 (1994).	
		#WICKHAM et al., Integrins $\alpha v \beta 3$ and $\alpha v \beta 5$ Promote Adenovirus Internalization but Not Virus Attachment, Cell, 73, 309-319 (1993).	

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Serial No.: 09/348,354;

Filed: July 7, 1999

For: CHIMAERIC ADENOVIRUSES, which application is being relied upon for an earlier filing date under 35 U.S.C. § 120.